

## 7918A Multi-Conductor - Category 5e DataTuff® Twisted Pair Cable



For more Information  
please call

1-800-Belden1



### General Description:

24 AWG solid bare copper conductors, twisted pairs, polyolefin insulation, industrial grade sunlight- and oil-resistant PVC jacket, rip cord. Sequential marking at two foot intervals.

### Usage (Overall)

**Suitable Applications:**

Industrial Ethernet, Harsh Environments, 200MHz Category 5e, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, CMX - Outdoor, RJ-45 Compatible

### Physical Characteristics (Overall)

#### Conductor

**AWG:**

# Pairs	AWG	Stranding	Conductor Material
4	24	Solid	BC - Bare Copper

**Total Number of Conductors:** 8

#### Insulation

**Insulation Material:**

Insulation Material
PO - Polyolefin

#### Outer Shield

**Outer Shield Material:**

Outer Shield Material
Unshielded

#### Outer Jacket

**Outer Jacket Material:**

Outer Jacket Material
Industrial Grade PVC - Polyvinyl Chloride

**Outer Jacket Ripcord:** Yes

#### Overall Cable

**Overall Nominal Diameter:** 5.842 mm

#### Pair

**Pair Color Code Chart:**

Number	Color
1	White/Blue Stripe & Blue
2	White/Orange Stripe & Orange
3	White/Green Stripe & Green
4	White/Brown Stripe & Brown

### Mechanical Characteristics (Overall)

**Installation Temperature Range:** -20°C To +75°C

**Operating Temperature Range:** -40°C To +75°C

**Bulk Cable Weight:** 35.717 Kg/Km

**Max. Recommended Pulling Tension:** 155.687 N

## 7918A Multi-Conductor - Category 5e DataTuff® Twisted Pair Cable

Min. Bend Radius/Minor Axis:	12.700 mm
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### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR, CMX-Outdoor
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CEC/C(UL) Specification:	CMG
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EU Directive 2011/65/EU (ROHS II):	Yes
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EU CE Mark:	Yes
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EU Directive 2000/53/EC (ELV):	Yes
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EU Directive 2002/95/EC (RoHS):	Yes
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EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
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EU Directive 2002/96/EC (WEEE):	Yes
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EU Directive 2003/11/EC (BFR):	Yes
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CA Prop 65 (CJ for Wire & Cable):	Yes
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MII Order #39 (China RoHS):	Yes
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PMSHA Specification:	P-07-KA060003
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Other Specification:	NEMA WC-63.1 Category 5e, UL verified to Category 5e
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#### Applicable Patents:

Country
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#### Flame Test

UL Flame Test:	UL1666 Riser
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CSA Flame Test:	FT4
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IEEE Flame Test:	1202
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#### Suitability

Suitability - Outdoor:	Yes
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Sunlight Resistance:	Yes
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Oil Resistance:	Yes
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#### Plenum/Non-Plenum

Plenum (Y/N):	No
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### Electrical Characteristics (Overall)

#### Nom. Mutual Capacitance:

Capacitance (pF/m)
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49.215
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Maximum Capacitance Unbalance (pF/100 m):	330
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#### Nominal Velocity of Propagation:

VP (%)
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68
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#### Maximum Delay:

Delay (ns/100 m)
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510 @ 100MHz
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#### Max. Delay Skew:

Delay Skew (ns/100 m)
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45
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#### Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
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METRIC MEASUREMENT VERSION

## 7918A Multi-Conductor - Category 5e DataTuff® Twisted Pair Cable

9.38

### Max. Operating Voltage - UL:

**Voltage**  
300 V RMS

### Maximum DCR Unbalanced:

**DCR Unbalance @ 20°C (%)**  
3

## Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)	Min. SRL (dB)
1	2.0	65.3	62.3	63.0	60.0	20.0	23
4	4.1	56.3	53.3	51.0	49.0	23.0	23.0
8	5.8	51.8	48.8	46.0	43.0	24.5	24.5
10	6.5	50.3	47.3	43.0	41.0	25.0	25.0
16	8.2	47.3	44.3	39.0	36.0	25.0	25.0
20	9.3	45.8	42.8	36.5	33.5	25.0	25.0
25	10.4	44.3	41.3	33.9	30.9	24.3	24.3
31.25	11.7	42.9	39.9	31.0	28.0	23.6	23.6
62.5	17.0	38.4	35.4	22.0	19.0	21.5	21.5
100	22.0	35.3	32.3	14.0	11.0	20.1	20.1
155	28.1	32.5	29.5	4.4	1.4	15.8	
200	32.0	30.8	27.8	4.0	1.0	15.0	

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	63.8	60.8
4	100 ± 15	100 ± 15	51.7	48.7
8	100 ± 15	100 ± 15	45.7	42.7
10	100 ± 15	100 ± 15	43.8	40.8
16	100 ± 15	100 ± 15	39.7	36.7
20	100 ± 15	100 ± 15	37.7	34.7
25	100 ± 15	100 ± 15	35.8	32.8
31.25	100 ± 15	100 ± 15	33.9	30.9
62.5	100 ± 15	100 ± 15	27.8	24.8
100	100 ± 15	100 ± 15	23.8	20.8
155	100 ± 25	100 ± 15	19.9	16.9
200	100 ± 25	100 ± 15	17.7	14.7

## Notes (Overall)

**Notes:** Operating temperatures are subject to length de-rating. Cable passes -40C Cold Bend per UL 1581.

**Notes (Cont'd.):** T568A Plug Compatible Part Number: R301603 T568B Plug Compatible Part Number: R301604

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7918A 0061000	1,000 FT	26.000 LB	BLUE, LIGHT	C	4 PR #24 PO PVC
7918A 0101000	1,000 FT	26.000 LB	BLACK	C	4 PR #24 PO PVC
7918A 01010000	10,000 FT	250.000 LB	BLACK	C	4 PR #24 PO PVC
7918A 0102000	2,000 FT	50.000 LB	BLACK	C	4 PR #24 PO PVC

**Notes:**  
C = CRATE REEL PUT-UP.

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